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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hoffmanwarnick.com

## Application No. Applicant(s) 09/864,015 TRESSER ET AL. Office Action Summary Examiner Art Unit JESSICA L. LEMIEUX 3693 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 08 September 2009. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-3.8-11.14-22.25-29.33 and 34 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-3.8-11.14-22.25-29 and 33-34 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some \* c) ☐ None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/35/08)

Attachment(s)

Interview Summary (PTO-413)
Paper No(s)/Mail Date. \_\_\_\_\_.

6) Other:

5) Notice of Informal Patent Application

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#### DETAILED ACTION

 This Final Office action is in response to the application filed on May 23<sup>rd</sup>, 2001 and in response to the applicant's arguments/amendments filed on September 8th, 2009. Claims 1-3. 8-11. 14-22. 25-29. 33 and 34 are pending.

### Response to Arguments

- 2. Applicant's arguments with respect to 35 U.S.C. 101 rejection of claims 25-29 and 33-34 have been fully considered but they are not persuasive. The particular machine tie or particular transformation must meet two corollaries to pass the test for subject matter eligibility. First, the use of the particular machine or transformation of the particular article must impose a meaningful limit on the claim's scope. So, a machine tie in only a field-of-use limitation would not be sufficient. Second, the use of the particular machine or the transformation of the particular article must involve more than insignificant "extra-solution" activity. If the machine or transformation is only present in a field-of-use limitation or in a step that is only insignificant "extra-solution" activity, such as data gathering or outputting, the claim fails the M-or-T test, despite the presence of a machine or a transformation in the claim. Here claims 25-29 and 33-34 fail to meet the requirements since there the use of the "computing device" is used only in a step of insignificant "extra-solution" activity.
- Applicant states that the prior art "does not teach or suggest each and every feature" of claims 1, 11, 15, 25 and 34 as amended. Examiner notes that these arguments are made with respect to the amended claims. Examiner disagrees with the

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applicant's conclusion that the pending claims as amended are in condition for allowance, as the amended claims have been considered but applicant's arguments are moot in view of the new ground(s) of rejection.

4. Applicant continues to assert that Applicant's invention was prior to the effective date of Brown based upon the proof previously filed with the Office. Applicant points to Mr. Sturman's Declaration which states, inter alia, "the invention was workable as of 03-11-2000 as stated in answer to Question 1 of the Disclosure of Invention (Exh. "A")." Examiner notes that Question 1 further specifies that "Workable means i.e. when you know that your design will solve the problem." Therefore, Examiner acknowledges that the Declaration establishes conception of the invention however does not show reduction of practice. The date of conception is the date at which there is the "formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." (Coleman v. Dines, 754 F.2d 353, 359 Fed. Cir. 1985). A reduction to practice is either actual or constructive. An actual reduction to practice occurs when a physical embodiment of the invention has been constructed that works for its intended purpose. A constructive reduction to practice occurs upon the filing of a patent application that satisfies the disclosure requirements of 35 U.S.C. 112 for the invention claimed therein. Reasonable diligence is proved by evidence that the inventor was continuously active in working toward a reduction to practice of the invention they conceived, or that a legitimate excuse exists for any inactivity during the relevant time period.

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Examiner will reiterate what was sent in the Non-Final office action mailed July 22nd, 2009. The declaration filed on April 22<sup>nd</sup>, 2009 under 37 CFR 1.131 has been considered but is ineffective to overcome the Brown reference.

## Examiner notes that as per the MPEP:

III. THREE WAYS TO SHOW PRIOR INVENTION (see MPEP 715)

The affidavit or declaration must state FACTS and produce such documentary evidence and exhibits in support thereof as are available to show conception and completion of invention in this country or in a NAFTA or WTO member country (MPEP § 715.07(c)), at least the conception being at a date prior to the effective date of the reference. Where there has not been reduction to practice prior to the date of the reference, the applicant or patent owner must also show diligence in the completion of his or her invention from a time just prior to the date of the reference continuously up to the date of an actual reduction to practice or up to the date of filing his or her application (filling constitutes a constructive reduction to practice, 37 CFR 1.131).

As discussed above, 37 CFR 1.131(b) provides three ways in which an applicant can establish prior invention of the claimed subject matter. The showing of facts must be sufficient to show:

- (A) > (actual)< reduction to practice of the invention prior to the effective date of the reference; or
- (B) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to a subsequent (actual) reduction to practice; or

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(C) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to the filing date of the application (constructive reduction to practice).

Examiner notes that it seems as though Applicant is attempting to show prior invention by (C) which requires two steps, (1) conception of the invention prior to the effective date of the reference and (2) due diligence from prior to the reference date to the filing date of the application.

Conception is the mental part of the inventive act, but it must be capable of proof, as by drawings, complete disclosure to another person, etc. In Mergenthaler v. Scudder, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897), it was established that conception is more than a mere vague idea of how to solve a problem; the means themselves and their interaction must be comprehended also.

Where conception occurs prior to the date of the reference, but reduction to practice is afterward, it is not enough merely to allege that applicant or patent owner had been diligent. Ex parte Hunter, 1889 C.D. 218, 49 O.G. 733 (Comm'r Pat. 1889). Rather, applicant must show evidence of facts establishing diligence.

Examiner notes that although both Exhibit's A and B can be shown to have been "created" prior to the effective date of the reference, they have either been modified at a date later than the effective date of the reference, or archived later than the effective date of the reference. Examiner notes that since it appears that none of the exhibits clearly show conception prior to the effective date of the reference, the Applicant has therefore, not met step (1).

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Examiner notes that stating that they merely "diligently and actively assisted the IBM Corporation Patent Department in the planning, preparation, review and filing" of the application does not constitute diligence by the applicant. Examiner notes that Applicant therefore, has not met step (2).

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Brown reference to either a constructive reduction to practice or an actual reduction to practice.

## Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

 Claims 25-29 and 33-34 are rejected under 35 U.S.C. 101 because the claimed invention is not directed to a secondary statutory subject matter/class.

Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must be (1) tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101 and should be rejected as being directed to non-statutory subject matter. In addition to being tied to another statutory class, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being

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transformed, for example by identifying the material that is being changed to a different state. See In re Bilski, 88 USPQ2d 1385 (Fed. Cir. 2008). Merely having "another statutory class" in the preamble and not in the body of the claim is also not sufficient to render the claim statutory.

An example of a method claim that would <u>not</u> qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

The particular machine tie or particular transformation must meet two corollaries to pass the test for subject matter eligibility. First, the use of the particular machine or transformation of the particular article must impose a meaningful limit on the claim's scope. So, a machine tie in only a field-of-use limitation would not be sufficient. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, the use of the particular machine or the transformation of the particular article must involve more than insignificant "extrasolution" activity. If the machine or transformation is only present in a field-of-use limitation or in a step that is only insignificant "extra-solution" activity, such a data gathering or outputting, the claim fails the M-or-T test, despite the presence of a machine or a transformation in the claim.

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A method claim that fails to meet one of the above requirements is not in compliance with the statutory requirements of 35 U.S.C. 101 for patent eligible subject matter. Here claims 25-29 and 33-34 fail to meet the above requirements since there is neither a physical transformation nor a sufficient tie to another statutory class, such as hardware. Thus, it is unclear as to whether or not the claims are mere processes that involve purely human labor and further the claims as amended can be read as solely software per se and examiner request actual physical hardware to be used..

Appropriate correction is required.

Claims 11 and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 11 and 14 recite "program code." Claims 11 and 14 are considered non-statutory because of the incorporation of software, per se. Functional Descriptive material per se is not statutory. Functional Descriptive material in combination with an appropriate computer readable medium must be capable of producing a useful, concrete and tangible result when used in a computer system. Since the "software" lack storage on a medium and there are no instructions in executable form, no underlying functionality occurs and thus there is no practical application. For these reasons, claims 11 and 14 fails to satisfy one of the statutory categories set form in 35 U.S.C. 101 and is therefore considered to be non-statutory.

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

 Claims 1-3, 8-11, 15, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication US2002/0065766 to Brown et al (hereinafter Brown) in view of US Patent Number 5,297,031 to Gutterman et al (hereinafter Gutterman).

As per claims 1, 11, 14, 15, and 34

- Brown teaches the system, medium, process and method of an electric marketplace via a network comprising:
- a. broadcasting a price quote from a market maker over the network at a beginning of a current trading interval (paragraphs 0015+),
- b. distributing the price quote over a plurality of network nodes within the network (paragraphs 0015+),
- c. receiving an order submitted from a participant who is in communication with one of the network nodes (paragraphs 0015 and 0044-0067),
- d. time stamping the order when the order passes through a trusted node, delivering the order to the market maker and examining the time stamp of the order to determine if the order qualifies for processing during the current trading interval (paragraphs 0044-0067),
- e. where, comparing the timestamp with a first predetermined time set during the trading interval, comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time (paragraphs 0044-0067).

Brown teaches the trading system defines a trading cut-off time during each trading interval, qualifies orders by comparing the time stamp for each order with the trading cut-off time for the current trading interval, defines an effective endpoint for each trading interval based on a computational time of the market maker and qualifies orders

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by comparing a time the order was received by the market maker with the effective endpoint of the current trading interval (paragraphs 0015, 0044-0056 and 0061-0067).

Brown discloses a means for examining timing information that compares a time the order was received with an effective endpoint set during the current interval to determine if the order qualifies for processing and a means for examining timing information that compares a time the order was received with an effective endpoint set during the current interval to determine if the order qualifies for processing (paragraphs 0015+).

Brown does not specifically teach each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker.

Gutterman teaches each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker (column 7, line 59- column 8, line 53).

Gutterman further teaches receiving a time stamp at the market maker (submitting timestamp orders to the market) (column 8. line 10- column 9. line 13).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Brown to include that each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker and receiving a time stamp at the market maker as taught by Gutterman to assist with audits and maintain the integrity of orders as well as carrying out order matching features.

As per claims 2-3

Brown discloses a trading interval including a fixed amount of time, a trading interval including a variable amount of time defined by the trading system (paragraphs 0015 & 0050-0067).

As per claim 8

Brown discloses a trading system executing each order that qualifies for processing at the call auction of the current trading interval unless an order price does not meet a price fixed by the trading system (paragraphs 0015, 0044-0056 and 0061-0067).

As per claim 9

Brown discloses a trading system that places each order that does not qualify for processing into a queue for consideration during a subsequent call auction (paragraph 0015).

As per claim 10

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Brown discloses a system for broadcasting price quotes to each of the nodes in the network (paragraph 0015).

8. Claims 14, 16-21, 26-28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication US2002/0065766 to Brown et al (hereinafter Brown) in view of US Patent Number 5,297,031 to Gutterman et al (hereinafter Gutterman) further in view of US Patent Publication US2002/0019795 to Madoff et al (hereinafter Madoff).

As per claims 14 and 16-21

Brown teaches an electric marketplace via a network that qualifies orders. Brown and Gutterman do not specifically teach an electronic exchange wherein the market participants submit orders to the network from user interfaces that communicate with the network notes, an electronic exchange wherein the user interfaces comprise web browsers, an electronic exchange wherein the user interfaces comprise cellular devices, an electronic exchange wherein the market information further includes quote information established at a previous call auction, an electronic exchange further comprising means for ensuring that all network nodes receive quote information within a predetermined window of time, an electronic exchange, wherein the quote information is distributed over the network using Pub/Sub technology.

Madoff teaches an electronic exchange wherein the market participants submit orders to the network from user interfaces that communicate with the network notes, an electronic exchange wherein the user interfaces comprise web browsers, an electronic exchange wherein the user interfaces comprise cellular devices, an electronic exchange wherein the market information further includes quote information established at a previous call auction, an electronic exchange further comprising means for ensuring that all network nodes receive quote information within a predetermined window of time, an electronic exchange, wherein the quote information is distributed over the network using Pub/Sub technology (paragraphs 0017+).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Brown and Gutterman to include an electronic exchange wherein the market participants submit orders to the network from user interfaces that communicate with the network notes, an electronic exchange wherein the user interfaces comprise web browsers, an electronic exchange wherein the user interfaces comprise cellular devices, an electronic exchange wherein the market information further includes quote information established at a previous call auction, an electronic exchange further comprising means for ensuring that all network nodes receive quote information within a predetermined window of time, an electronic exchange, wherein the quote information is distributed over the network using Pub/Sub

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technology as taught by Madoff because the additional information and ways to submit bids would be more user-friendly and make the trading system more efficient.

As per claim 25-28 and 33

- Brown teaches the system, medium, process and method of an electric marketplace via a network comprising:
- a. broadcasting a price quote from a market maker over the network at a beginning of a current trading interval (paragraphs 0015+),
- b. distributing the price quote over a plurality of network nodes within the network (paragraphs 0015+),
- c. receiving an order submitted from a participant who is in communication with one of the network nodes (paragraphs 0015 and 0044-0067).
- d. time stamping the order when the order passes through a trusted node, delivering the order to the market maker and examining the time stamp of the order to determine if the order qualifies for processing during the current trading interval (paragraphs 0044-0067).
- e. where, comparing the timestamp with a first predetermined time set during the trading interval, comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time (paragraphs 0044-0067).

Brown does not specifically teach each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker.

Gutterman teaches each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker (column 7, line 59- column 8, line 53).

Gutterman further teaches receiving a time stamp at the market maker (submitting timestamp orders to the market) (column 8, line 10- column 9, line 13).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Brown to include that each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker and receiving a time stamp at the market maker as taught by Gutterman to assist with audits and maintain the integrity of orders as well as carrying out order matching features.

Brown and Gutterman do not specifically teach the price quote being distributed using a Pub/sub technology, the order being submitted via a browser, the order being submitted via a cellular device, the examining sep comparing a time stamp to a predetermined time set during the current trading interval, a step of comparing a time the order was received by the market maker with a second predetermined time set during the current trading interval, a step of processing the order if it qualifies, wherein

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the processing step includes the steps of determining if an order meets a price set by the market maker at the end of the current trading interval and executing the order at the end of the current trading interval, a step of considering the order for processing during a subsequent interval if the order does not qualify.

Madoff teaches the price quote being distributed using a Pub/sub technology (paragraphs 0017-0019), the order being submitted via a browser (paragraphs 0017-0019), the order being submitted via a cellular device (paragraphs 0015 & 0017-0019), the examining sep comparing a time stamp to a predetermined time set during the current trading interval (paragraphs 0055-0057), a step of comparing a time the order was received by the market maker with a second predetermined time set during the current trading interval (paragraphs 0055-0057), a step of processing the order if it qualifies, wherein the processing step includes the steps of determining if an order meets a price set by the market maker at the end of the current trading interval and executing the order at the end of the current trading interval (paragraphs 0055-0057), a step of considering the order for processing during a subsequent interval if the order does not qualify (paragraphs 0026-0027).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Brown and Gutterman to include the price quote being distributed using a Pub/sub technology, the order being submitted via a browser, the order being submitted via a cellular device, the examining sep comparing a time stamp to a predetermined time set during the current trading interval, a step of comparing a time the order was received by the market maker with a second predetermined time set during the current trading interval, a step of processing the order if it qualifies, wherein the processing step includes the steps of determining if an order meets a price set by the market maker at the end of the current trading interval and executing the order at the end of the current trading interval, a step of considering the order for processing during a subsequent interval if the order does not qualify as taught by Madoff because the additional information and ways to submit bids would be more user-friendly and make the trading system more efficient.

9. Claims 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication US2002/0065766 to Brown et al (hereinafter Brown) in view of US Patent Number 5,297,031 to Gutterman et al (hereinafter Gutterman) in view of US Patent Publication US2002/0019795 to Madoff et al (hereinafter Madoff) and further in view of US Patent Number 6,839,021 to Shevnblat et al (hereinafter Shevnblat).

As per claims 22 and 29

Brown, Gutterman and Madoff disclose an electronic exchange implemented over a network with network nodes, gateway agents and a market maker system as disclosed above.

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Brown, Gutterman and Madoff do not specifically teach the gateway agents obtaining times for the time stamps from a global positioning system.

Sheynblat teaches obtaining times for time stamps from a global positioning system (column 3. lines 9-67- column 4. lines 1-2).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the electronic exchange implemented over a network with network nodes, gateway agents and a market maker system to include obtaining times for time stamps from a global positioning system because Sheynblat discloses using the times for time stamps from a global positioning system for use on a network, such as the Internet, or other types of computer networking systems (column 12, lines 21-38).

10. Claims 1-3, 8-11, 15, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Number 2002/0161687 to Serkin et al. (hereinafter Serkin) in view of US Patent 6,347,307 to Sanhu (hereinafter Sanhu) further in view of US Patent Number 5,297,031 to Gutterman et al (hereinafter Gutterman).

As per claims 1, 11, 14, 15, and 34

Serkin teaches the system, medium, process and method of an electric marketplace via a network comprising:

- a. broadcasting a price quote from a market maker over the network at a beginning of a current trading interval (paragraphs [0019, 0028, and 0037]),
- b. distributing the price quote over a plurality of network nodes within the network (paragraphs [0025, 0028]),
- c. receiving an order submitted from a participant who is in communication with one of the network nodes (paragraph [0019]),
- d. time stamping the order when the order passes through a trusted node, delivering the order to the exchange and examining the time stamp of the order to determine if the order qualifies for processing during the current trading interval and comparing the timestamp with a first predetermined time set during the trading interval, qualifying the order if the timestamp is less than the first predetermined time (paragraphs [0029, 0049]).

Serkin does not specifically teach comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time.

Sanhu teaches comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if the time the order was received is less than the second predetermined time.

Examiner notes that incorporating Expiry times into Serkin would enable qualification of an order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time.

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Therefore it would have been obvious to one skilled in the art at the time of invention to modify Serkin to include comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time as taught by Sanhu to incorporate expiry times enabling a provider to establish a deadline for price quotes to be valid

Serkin and Sandhu teach defines a trading cut-off time during each trading interval, qualifies orders by comparing the time stamp for each order with the trading cut-off time for the current trading interval, defines an effective endpoint for each trading interval based on a computational time of the market, qualifies orders by comparing a time the order was received by the market maker with the effective endpoint of the current trading interval (Serkin: paragraphs (0029, 0049, 00541, Sanhu; column 40- 43).

Serkin and Sandhu teaches discloses a means for examining timing information that compares a time the order was received with an effective endpoint set during the current interval to determine if the order qualifies for processing and a means for examining timing information that compares a time the order was received with an effective endpoint set during the current interval to determine if the order qualifies for processing (Serkin: paragraphs [0029, 0049, 0054], Sanhu: column 40- 43).

Serkin and Sanhu does not specifically teach delivering the order to the market maker and each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker.

Gutterman teaches delivering the order to the market maker and each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker (column 7, line 59- column 8, line 53). Gutterman further teaches receiving a time stamp at the market maker (submitting timestamp orders to the market) (column 8, line 10- column 9, line 13).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Serkin and Sanhu to include delivering the order to the market maker and that each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker and receiving a time stamp at the market maker as taught by Gutterman to assist with audits and maintain the integrity of orders as well as carrying out order matching features.

As per claims 2-3

Serkin and Sandhu disclose a trading interval including a fixed amount of time, and a trading interval including a variable amount of time defined by the trading system (Serkin: paragraphs [0029, 0049, 0054], Sanhu: column 40- 43).

As per claim 8

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Serkin and Sandhu discloses a trading system executing each order that qualifies for processing at the call auction of the current trading interval unless an order price does not meet a price fixed by the trading system (Serkin: paragraphs [0029, 0049, 0054], Sanhu: column 40- 43).

As per claim 9

Serkin discloses a trading system that places each order that does not qualify for processing into a queue for consideration during a subsequent call auction (paragraph [0054]).

As per claim 10

Sandhu discloses a system for broadcasting price quotes to each of the nodes in the network (column 7, lines 5-17).

11. Claims 14, 16-21, 25-28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Number 2002/0161687 to Serkin et al. (hereinafter Serkin) in view of US Patent 6,347,307 to Sanhu (hereinafter Sanhu) in view of US Patent Number 5,297,031 to Gutterman et al (hereinafter Gutterman) further in view of US Patent Publication US2002/0019795 to Madoff et al (hereinafter Madoff).

As per claims 14 and 16-21

Serkin teaches an electric marketplace via a network that qualifies orders. Serkin, Sanhu and Gutterman do not specifically teach an electronic exchange wherein the market participants submit orders to the network from user interfaces that communicate with the network notes, an electronic exchange wherein the user interfaces comprise web browsers, an electronic exchange wherein the user interfaces comprise cellular devices, an electronic exchange wherein the market information further includes quote information established at a previous call auction, an electronic exchange further comprising means for ensuring that all network nodes receive quote information within a predetermined window of time, an electronic exchange, wherein the quote information is distributed over the network using Pub/Sub technology.

Madoff teaches an electronic exchange wherein the market participants submit orders to the network from user interfaces that communicate with the network notes, an electronic exchange wherein the user interfaces comprise web browsers, an electronic exchange wherein the user interfaces comprise cellular devices, an electronic exchange wherein the market information further includes quote information established at a previous call auction, an electronic exchange further comprising means for ensuring that all network nodes receive quote information within a predetermined window of time, an electronic exchange, wherein the quote information is distributed over the network using Pub/Sub technology (paragraphs 0017+).

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Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Serkin, Sanhu and Gutterman to include an electronic exchange wherein the market participants submit orders to the network from user interfaces that communicate with the network notes, an electronic exchange wherein the user interfaces comprise web browsers, an electronic exchange wherein the user interfaces comprise cellular devices, an electronic exchange wherein the market information further includes quote information established at a previous call auction, an electronic exchange further comprising means for ensuring that all network nodes receive quote information within a predetermined window of time, an electronic exchange, wherein the quote information is distributed over the network using Pub/Sub technology as taught by Madoff because the additional information and ways to submit bids would be more user-friendly and make the trading system more efficient.

As per claims 25-28 and 33

Serkin teaches the system, medium, process and method of an electric marketplace via a network comprising:

- a. broadcasting a price quote from a market maker over the network at a beginning of a current trading interval (paragraphs [0019, 0028, and 0037]),
- b. distributing the price quote over a plurality of network nodes within the network (paragraphs [0025, 0028]),
- c. receiving an order submitted from a participant who is in communication with one of the network nodes (paragraph [0019]),
- d. time stamping the order when the order passes through a trusted node, delivering the order to the exchange and examining the time stamp of the order to determine if the order qualifies for processing during the current trading interval and comparing the timestamp with a first predetermined time set during the trading interval, qualifying the order if the timestamp is less than the first predetermined time (paragraphs 10029, 00491).

Serkin does not specifically teach comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time.

Sanhu teaches comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if the time the order was received is less than the second predetermined time.

Examiner notes that incorporating Expiry times into Serkin would enable qualification of an order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify Serkin to include comparing a time the order was received with a second predetermined time set during the current trading interval and qualifying the order if both the timestamp is less than the first predetermined time and the time the order was received is less than the second predetermined time as taught by Sanhu to

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incorporate expiry times enabling a provider to establish a deadline for price quotes to be valid

Serkin and Sanhu does not specifically teach delivering the order to the market maker and each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker.

Gutterman teaches delivering the order to the market maker and each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker (column 7, line 59- column 8, line 53). Gutterman further teaches receiving a time stamp at the market maker (submitting timestamp orders to the market) (column 8, line 10- column 9, line 13).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Serkin and Sanhu to include delivering the order to the market maker and that each of the orders includes a time stamp from one of a plurality of agents residing within the network indicating a time that is subsequent to the order being placed by a participant and precedes the order being received by the market maker and receiving a time stamp at the market maker as taught by Gutterman to assist with audits and maintain the integrity of orders as well as carrying out order matching features.

Serkin, Sanhu and Gutterman do not specifically teach the price quote being distributed using a Pub/sub technology, the order being submitted via a browser, the order being submitted via a cellular device, the examining sep comparing a time stamp to a predetermined time set during the current trading interval, a step of comparing a time the order was received by the market maker with a second predetermined time set during the current trading interval, a step of processing the order if it qualifies, wherein the processing step includes the steps of determining if an order meets a price set by the market maker at the end of the current trading interval and executing the order at the end of the current trading interval, a step of considering the order for processing during a subsequent interval if the order does not qualify.

Madoff teaches the price quote being distributed using a Pub/sub technology (paragraphs 0017-0019), the order being submitted via a browser (paragraphs 0017-0019), the order being submitted via a cellular device (paragraphs 0015 & 0017-0019), the examining sep comparing a time stamp to a predetermined time set during the current trading interval (paragraphs 0055-0057), a step of comparing a time the order was received by the market maker with a second predetermined time set during the current trading interval (paragraphs 0055-0057), a step of processing the order if it qualifies, wherein the processing step includes the steps of determining if an order meets a price set by the market maker at the end of the current trading interval and executing the order at the end of the current trading interval (paragraphs 0055-0057), a step of considering the order for processing during a subsequent interval if the order does not qualify (paragraphs 0026-0027).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the trading system of Serkin, Sanhu and Gutterman to include the

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price quote being distributed using a Pub/sub technology, the order being submitted via a browser, the order being submitted via a cellular device, the examining sep comparing a time stamp to a predetermined time set during the current trading interval, a step of comparing a time the order was received by the market maker with a second predetermined time set during the current trading interval, a step of processing the order if it qualifies, wherein the processing step includes the steps of determining if an order meets a price set by the market maker at the end of the current trading interval and executing the order at the end of the current trading interval, a step of considering the order for processing during a subsequent interval if the order does not qualify as taught by Madoff because the additional information and ways to submit bids would be more user-friendly and make the trading system more efficient.

12. Claims 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Number 2002/0161687 to Serkin et al. (hereinafter Serkin) in view of US Patent 6,347,307 to Sanhu (hereinafter Sanhu) in view of US Patent Number 5,297,031 to Gutterman et al (hereinafter Gutterman) in view of US Patent Publication US2002/0019795 to Madoff et al (hereinafter Madoff) and further in view of US Patent Number 6,839,021 to Sheynblat et al (hereinafter Sheynblat).

As per claims 22 and 29

Serkin, Sanhu, Gutterman and Madoff disclose an electronic exchange implemented over a network with network nodes, gateway agents and a market maker system as disclosed above.

Serkin, Sanhu, Gutterman and Madoff do not specifically teach the gateway agents obtaining times for the time stamps from a global positioning system.

Sheynblat teaches obtaining times for time stamps from a global positioning system (column 3, lines 9-67- column 4, lines 1-2).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the electronic exchange implemented over a network with network nodes, gateway agents and a market maker system to include obtaining times for time stamps from a global positioning system because Sheynblat discloses using the times for time stamps from a global positioning system for use on a network, such as the Internet, or other types of computer networking systems (column 12, lines 21-38).

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#### Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA L. LEMIEUX whose telephone number is (571)270-3445. The examiner can normally be reached on Monday-Thursday 8AM-5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jessica L Lemieux Examiner Art Unit 3693

/J. L. L./ Examiner, Art Unit 3693 December 2009

/Stefanos Karmis/ Primary Examiner, Art Unit 3693